

A New Species in the Genus *Evagetes* (Hymenoptera: Psammocharidae) with Photomicrographs of the Genitalia and Subgenital Plate

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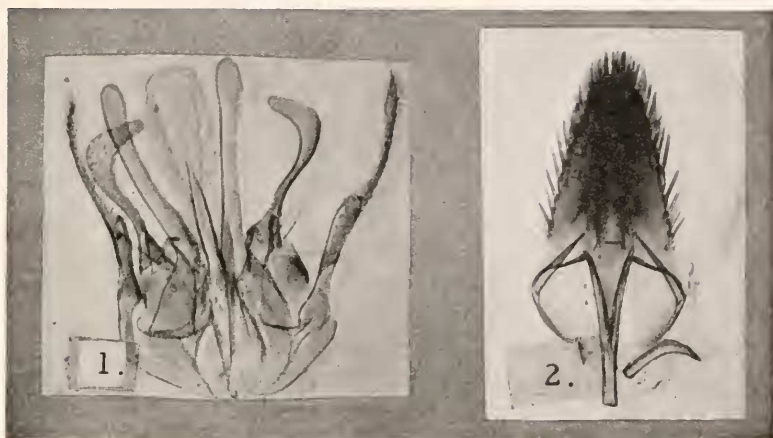
***Evagetes asignus* n. sp.**

Holotype male: Color black, except just a very faint, white line at the upper, posterior orbits; in certain lights the body has a very definite purplish color; a few short, scattered, black hairs on the front, vertex and pronotum, but very few hairs elsewhere; very heavy white, silvery pubescence on the clypeus, face, front, pronotum, sides of the scutellum, dorsal surface of the post-scutellum, on the whole propodeum, and in lesser amount on the ventral parts of the coxa and trochanters; also on the dorsal part of the first tergite and half of the second; the pronotum covered completely with very brilliant, glistening hairs and the hairs on the side of the scutellum and the apex are rather long and not appressed; from the front the head is about as long as wide, clypeus truncate in front, vertex in a slight arch above the eyes with no hump at the ocelli, eyes practically parallel except a small indentation above the middle; from the side the head is very thin, the front very strongly protruding above the eyes, the vertex slightly so, absolutely no posterior orbits, no temples, clypeus flat over its whole length; from the top, the posterior ocelli are on the highest part of the vertex and from the crest this slopes off at an angle giving practically no temples; ratios of first four and last three antennal joints are as: 30:10:15:20:14:14:18; third antennal joint is $1\frac{1}{2}$ as long as second, and $\frac{3}{4}$ as long as fourth; the interocular distance is 0.62 of the transfacial, and is equal to the vertex width; length of head to width of head is 0.94; interocular at the clypeus is equal to the vertex width; length of clypeus is equal to $\frac{1}{3}$ the width of clypeus; posterior edge of pronotum straight across, short, rising in a smooth, even curve; dorsal surface of scutellum U-shaped with very heavy glistening band of hair on sloping sides and on the post-scutellum; very

short longitudinal impression on the dorsal surface of the propodeum which is covered with rather long glistening white hairs which are, however, not appressed; wings cloudy with apex beyond the cells considerably darker; second cubital cell almost rectangular but with the first intercubital bowed at the center, concave on inside of cell; third cubital cell with the sides meeting on the radial vein, or in a few cases not quite meeting, thus triangular; first recurrent vein meets second cubital cell at the apical fourth, the second recurrent meeting the third beyond the center; basal vein slightly basad of the transverse in fore wings and in the rear wings the subdiscoidal and cubital veins are interstitial; in reflected light the first abdominal segment and the basal anterior half of the second one, completely covered with beautiful white glistening hairs; the rest of the abdomen not with the glistening pubescent hairs; legs spined about as in the other species; the ratios of the length of the joints of the posterior legs from the femora on are as 62:61:42:21:16:11:9; subgenital plate rather narrow, triangular without any trace of the basal black teeth which are on genital plate of every other species; normally these teeth are just at the base and about $\frac{1}{3}$ of the way in from the sides; rather broad longitudinal ridge in the center of the plate to about the apical fourth; length of thorax and head 3.63 mm., length of abdomen 3.63 mm., length of forewing 5.30 mm., rear wing 4.0 mm., length of genitalia 1.0 mm., width 0.60 mm., length of subgenital plate 0.79 mm., width 0.33 mm.

Holotype male: Kill Devil Hills, NORTH CAROLINA, VIII-3-52, K. V. Krombein (USNM).

Allotype female: Color black with very deep purplish reflections over the whole body except mandibles, and a very short white line on upper posterior orbits, which are reddish; propodeum with a few short hairs; very closely appressed white hairs on the clypeus, face, on the anterior orbits to the antennae, with much more brilliant sericeous hairs on the sides of the scutellum and the dorsal part of the postscutellum; otherwise the body almost completely covered with reddish brown hairs very closely appressed, giving it a purplish, sericeous appear-



1. *Evagetes asignus* n. sp. Genitalia $\times 60$.

2. *Evagetes asignus* n. sp. Subgenital plate $\times 60$.

ance; when seen from the front apex of clypeus is very slightly curved, but practically transverse, vertex at the eyes not higher than the eyes but the ocellar triangle is slightly raised, eyes practically parallel with the exception of a slight indentation above the middle of the head; when seen from the side, the front is slightly raised above the eyes but the vertex is not, clypeus slightly convex, no posterior orbits and no temples; the relative lengths of the first four joints and the last three antennal joints are as 22:9:20:16:13:15, thus the third and fourth are of equal length and the second about half as long as the third; the two posterior ocelli are located just exactly their diameter from posterior edge of the vertex where it slopes off to the posterior part of the head; pronotum is slightly concave on the posterior surface with no trace of angulation and a few appressed white hairs at the outer corners of the pronotum and the rest colored with slightly reddish hairs; the raised part of scutellum U-shaped, dorsal part much higher than the sides, the sides are almost vertical, covered with the glistening white hairs as noted before; propodeum slightly slanting on the dorsal surface, but rather perpendicular on the posterior surface with the posterior surface concave and the sides slightly extended

beyond the center parts; the wings very dusky over the whole surface, but much darker beyond the cell, the hind wing almost hyaline on the basal three quarters, third cubital cell is slightly open on the radial vein, second cubital almost rectangular but with the first cubital strongly bowed toward base, therefore concave on inside of cell; basal vein basad of the transverse vein in fore wings; in rear wings the cubitus is slightly basad of the subdiscoidal vein; first tergite slightly concave at the base in front, the abdomen widest about the middle of the second segment; a strong tarsal comb on the fore tarsal joint with 4 spines which are much longer than width of joint, the first one being smaller than the last three, these spines have a slightly reddish tint, especially at tip, the apical spine almost as long as the second tarsal joint; legs well spined similar to the other species of the genus; femora has very short hairs widely scattered; the ratios of the joints of the last leg beginning with the femora are to each other as 57:40:35:35:20:13:16; the interocular distance is 0.74 of the transfacial, and is 0.9 of the vertex width; length of head is 0.9 the width, the distance of the ocelli from the eyes is the same as that between the ocelli; the clypeus is 4 times as wide as long; the longest spur of the posterior tibial joint is $\frac{5}{6}$ the metatarsal; length of head and thorax 5.30 mm., length of abdomen 5.30 mm., length of fore wing 8.30 mm., length of rear wing 6.62 mm.

Allotype female: Kill Devil Hills, NORTH CAROLINA, VIII-4-52, Karl V. Krombein (USNM).

There are 105 female and 35 male paratypes from ten states extending from Fla. to Mass. along eastern seaboard to Mich., Kan., Texas and on to Colo.

Paratypes: 6 males, Alachua Co., Fla., IV-7-54, IV-12-52, H. E. Evans and N. Dennis (H.E.E.); 1 female, Alachua Co., Fla., H. V. Weems (H.V.W.); 5 females, Arcadia, DeSoto Co., Fla., IV-2-53, VI-2-53, Evans (H.E.E.); 2 females, Arcadia, Fla., VI-2-53, K. V. Krombein (K.V.K.); 1 female, Olga, Fla., III-30-54, K. V. Krombein (K.V.K.); 2 females, Miami, Fla., III-20-30-53, Krombein (K.V.K.); 1 female, Juniper, Marion Co., Fla., IV-5-53, Evans (H.E.E.); 1 female, Alabama Post, Mobile Co., Ala., IV-2-48, G. D. Valentine

(H.E.E.); 2 males, Kill Devil Hills, N. C., V-30-48, VII-9-50, Krombein (H.E.E.); 7 females, Kill Devil Hills, N. C., V-27-48, VIII-4-52, V-25-48, Krombein (K.V.K.); 73 females, Kill Devil Hills, N. C., VI-23-54, VII-1-54, VII-5-21-50, VI-26-50, VIII-1-4-52, VII-28-52, VI-2-48, IX-16-55, K. V. Krombein (58 K.V.K.) (15 U.S.N.M.); 1 male, Greenville, N. C., VII-6-06 (M.C.Z.); 1 male, Beltsville, Md., VI-17-50, D. R. and S. Shappirio (D.R.S.); 1 male, Cape May Point, N. J., R. G. Schmieder (R.G.S.); 1 male, Browns Mills, N. J., VIII-15-21, F4272 (Am. Mus.); 1 male, Springfield, Mass., Allen (M.C.Z.); 5 males, Kane R., Manhattan, Kan., VI-4-50, VII-16-50, Evans (H.E.E.); 1 male, Reno Co., Kan., VI-18-50, Evans (H.E.E.); 4 males, 6-10 mi. W. Ft. Davis, Tex. on Tex. 166, VII-15-23-48, on *Sphaeralcea angustifolia* (Cave) Evans (H.E.E.); 2 males, 1 female, Conlen, Tex., VIII-7-52, R. R. Dreisbach (R.R.D.); 4 males, 2 females, Lake Co., VII-20-46, Midland Co., VII-13-43, VII-13-37, Arenac Co., VII-26-51, females, Midland, VII-14-37, Benzie Co., VII-28-40, all Mich., Dreisbach (R.R.D.); 1 male, Washtenaw Co., Mich., VII-23-27, N. K. Bigelow (U. of M.); 1 male, Shenandoah, Ia., VIII-16-46, H. B. Green (Ia. State); 1 male, 9 females, Gt. Sand Dunes, Alamosa Co., Colo., VII-20-54, Evans (H.E.E.).

The hairs on the legs of the females do not approach in length or in number those of *E. bradleyi* (Banks). This species is easily distinguished in the male from the other species of the genus by the absence of small teeth near base of subgenital plate, the narrow sickle-shaped volsellae of genitalia, and by the brilliant silvery pubescence as noted in description. The female is distinguished by the very short, sparse hairs on the legs, the lack of temples back of eyes, the short length of third cubital cell on the radius, the deep concavity of first intercubital vein in the first cubital cell, and the fact that the cubital vein in rear wings meets subdiscoidal just apicad of subdiscoidal.

Dr. K. V. Krombein and H. E. Evans have discussed this species in the literature as follows:

KROMBEIN, K. V. Wasmann Jour. Biol. 10: 319, 1953. "*Evagetes*, new species (manuscript of R. R. Dreisbach). Four males (May 24 to June 5), 6 females (May 26 to June 5), 41 females (June 26 to July 22); predominantly in woods, but occasionally on barrens; 2 females on foliage of *Q. mari-*

landica. This may be *E. brevicornis* (Cresson), but that cannot be determined until it is possible to dissect the genitalia of the type specimen, a male."

KROMBEIN, K. V. Proc. Ent. Soc. Wash. 55: 130, 1953.

"*Evagetes*, n. sp. (MS. of R. R. Dreisbach). 29 females, 3 males, July 28–August 4; the majority on barrens; 6 females, 1 male on *Q. virginiana*; most specimens worn."

KROMBEIN, K. V., and EVANS, H. E. Proc. Ent. Soc. Wash. 56: 230, 1954. "*Evagetes*, n. sp. (Dreisbach MS.). Miami (2 females), Arcadia (6 females), Juniper Springs (1 female); mostly on sand flats."

KROMBEIN, K. V., and EVANS, H. E. Proc. Ent. Soc. Wash. 57: In Press, 1955. "*Evagetes*, n. sp. (Dreisbach MS.). Marco (2 males), Olga (6 females, 9 males), Ft. Pierce (2 females, 1 male)." These were all taken on sand covered with sparse vegetation.

Phlegethontius caribbeus Cary. Discovery of a Second Specimen (Lepidoptera: Sphingidae)

In October 1952, in Vol. lxiii, No. 8, of the ENTOMOLOGICAL NEWS I described a new species of Sphingid, caught by me in Haiti in March 1952, naming it *Phlegethontius caribbeus*. This was a female caught at Petionville, a town 1,600 feet high, very near to Port au Prince. This specimen, the type, is in the Type Series at the Academy of Natural Sciences in Philadelphia. A young Yale Senior named John G. Coutsis was collecting Lepidoptera for Yale in May, 1954, and found this second specimen, a male, at lights in the country halfway between Port au Prince and Petionville, but also in high hill country. The male is somewhat smaller than the female, but is a perfect, unrubbed specimen. Inasmuch as it is risky to describe a new species from one insect only, it is well to record the second of this species, in very much the same locality.

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